

Application No. 10/500,254

2

Docket No.: 06181/0201550-USO

**AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all previous versions and listing of claims in this application.

1-30. (Cancelled)

31. (New) A method of preparing a desiccant comprising the steps of:

selecting a salt solution;

drying a super absorbing polymer(SAP);

contacting the dried SAP with the salt solution in order to perform an ionic  
modification of the SAP; and

drying a hydrogel generated by the contact between the SAP and the salt solution.

32. (New) The method of claim 31, wherein the concentration of the salt solution is between 5-15wt%.

33. (New) The method of claim 31, wherein the salt solution comprises water as a solvent.

34. (New) A desiccant prepared by the method of claim 31.

35. (New) The desiccant of claim 34, wherein the SAP is cross-linked.

36. (New) The desiccant of claim 34, wherein the SAP takes a granular form.

37. (New) The desiccant of claim 34, wherein the granules have a maximum particle diameter of  
1,000µm.

38. (New) The desiccant of claim 34, wherein the SAP forms fiber or filaments.

RECEIVED  
CENTRAL FAX CENTER  
DEC 29 2006

Application No. 10/500,254

3

Docket No.: 06181/0201550-US0

39. (New) The desiccant of claim 34, wherein the SAP comprises polymer and/or copolymer in which acryl acid or acrylamide is cross-linked, propfpolymer of starch, cross-linked amyllum derivative, and/or cellulose derivative.
40. (New) A dehumidifying element comprising the desiccant of claim 34.
41. (New) A dehumidifying element comprising a carrier coated on a surface with the desiccant of claim 34.
42. (New) The dehumidifying element of claim 41, wherein the carrier is gas penetrable.
43. (New) The dehumidifying element of claim 41, wherein the desiccant is within the carrier.
44. (New) The dehumidifying element of claim 41, wherein the desiccant is in a granular form or a fibrous form.
45. (New) The dehumidifying element of claim 41, wherein the carrier comprises at least one of a woven textile, meshed textile, knitted fabric, knit, or bonded fabric.
46. (New) The dehumidifying element of claim 41, wherein the carrier comprises a combination of fibers and filaments.
47. (New) The dehumidifying element of claim 46, wherein the fiber and the filaments are selected from

Application No. 10/500,254

4

Docket No.: 06181/0201550-US0

a combination of at least one of a natural polymer and a composite polymer.

48. (New) The dehumidifying element of claim 41, wherein the carrier is in the form of a single layer or a multi-layer sheet.

49. (New) A method of making a dehumidifying element comprising the steps of:

- engaging a SAP to a carrier;
- drying the carrier to which the SAP is engaged;
- selecting a salt solution;
- contacting the carrier with the salt solution in order to perform an ionic modification of the SAP; and
- drying the carrier to which the SAP is engaged.

50. (New) The method of claim 49, wherein the concentration of the salt solution is between 5-15wt%.

51. (New) The method of claim 49, wherein the salt solution comprises water as a solvent.

52. (New) The method of claim 49, wherein the carrier is contacted with the salt solution by soaking or spraying the salt solution into the carrier.

53. (New) The method of claim 49, wherein the step of contacting the carrier with the salt solution is repeated.